



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/799,992

03/12/2004

Sean E. Purcell

308122.01/MFCP.149237

8783

45809

7590

06/25/2010

SHOOK, HARDY & BACON L.L.P.  
(MICROSOFT CORPORATION)  
INTELLECTUAL PROPERTY DEPARTMENT  
2555 GRAND BOULEVARD  
KANSAS CITY, MO 64108-2613

EXAMINER

MAI, KEVIN S

ART UNIT

PAPER NUMBER

2456

MAIL DATE

DELIVERY MODE

06/25/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/799,992	<b>Applicant(s)</b> PURCELL ET AL.	
	<b>Examiner</b> KEVIN S. MAI	<b>Art Unit</b> 2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11, 12, 15, 17, 18, 21-26 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12, 15, 17, 18, 21-26 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                     |                                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                         | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action has been issued in response to Applicant's Amendment filed April 15, 2010.
2. Claims 13, 14, 19 and 20 have been canceled. Claims 1 and 15 have been amended. Claims 1-9, 11, 12, 15, 17, 18, 21-26 and 29 have been examined and are pending.

### ***Response to Arguments***

3. Applicant's arguments filed April 15, 2010 have been fully considered but they are not persuasive.
4. Applicant's arguments with respect to the user based action being a reply have been considered but are moot in view of the new ground(s) of rejection.
5. Applicant's arguments with respect to the verification component have been considered but they are not persuasive. Applicant argues that Adkins' warning message is not in response to a user replying but rather a user viewing a message. While this may or may not be the case it is seen that the combination of Adkins with the other references discloses the limitation, not Adkins alone. Adkins is seen to be disclosing that the technique of warning a user when working with messages that are determined to be spam is known and accordingly it would be obvious to implement with other spam systems. Thus accordingly it would be obvious to implement Adkins feature with the other references to disclose applicant's limitation.
6. Applicant's arguments with respect to claim 15 have been considered but they are not persuasive. Applicant argues that none of the references disclose "determining whether at least one of the junk score of the junk rating exceed a first threshold and removing messages that

Art Unit: 2456

exceed the first threshold to mitigate inadvertent access of them by the user, wherein the messages that exceed the first threshold are removed before they are viewable on the user interface". More specifically applicant argues that Rajan teaches the opposite in that the email appears in the inbox, is then graded, and then moved to the appropriate folder. Examiner disagrees. Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. Paragraph [0031] of Rajan discloses the incoming Mail once graded may bypass the Inbox altogether and be immediately moved or copied into the respective spam directory according to its grade. Since the Inbox is bypassed it is seen that this discloses that they are removed before they are viewable.

7. Applicant's remaining arguments are the same as those above and are addressed similarly.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 2456

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. No. 2005/0165895 to Rajan et al. (hereinafter "Rajan") and further in view of US Pub. No. 2005/0080855 to Murray (hereinafter "Murray") and further in view of US Pat. No. 6161130 to Horvitz et al. (hereinafter "Horvitz") and further in view of US Pat. No. 7640305 to Arthur et al. (hereinafter "Arthur") and further in view of US Pub. No. 2004/0243844 to Adkins (hereinafter "Adkins").

12. **As to Claim 1, Rajan discloses a junk message interface system that facilitates identifying junk messages comprising:**  
**a processor for executing the following components** (Paragraph [0031] of Rajan discloses the grading of the e-mail for spaminess may be processed by either the server or the client processors):

Art Unit: 2456

**a message receiving component that collects at least one incoming message** (Paragraph [0014] of Rajan discloses an Inbox in which all incoming mail is normally received);

**a filtering component [that accepts the incoming message communicated from the message receiving component and determines whether a sender is known or trusted before scanning the message with a filter and] determining a junk score for the incoming message** (Paragraph [0015] of Rajan discloses each piece of incoming mail is graded), **the junk score is computed to reflect a spam confidence level of the message** (Paragraph [0015] of Rajan discloses grading is done to determine the level of spaminess of the e-mail), **wherein the junk score is a value or fractional value between 0 and 1** (Paragraph [0016] of Rajan discloses the scale being from 0 to 100. Where the it is seen that it is arbitrary whether the scale is form 0 -1 or from 0-100 since both represent the same information), **and the spam confidence level corresponds to a probability that the message is spam or junk** (Paragraph [0016] of Rajan disclose mail that is graded with a high level of spaminess is representative of likely constituting spam and that mail that is graded with a medium level of spaminess is representative of probably constituting spam. Thus it is seen that the measure of spaminess corresponds to the probability that a message is spam), **wherein once the message has been scored, the message is bucketized based on the determined junk score and tagged with a junk rating [which is added as a property on the message]** (Paragraph [0017] of Rajan discloses after grading the e-mail messages they are then moved into the appropriately labeled directory (bucketizing based on score). It is seen that the score was used as an actionable property to sort the incoming messages to the appropriate folders. Furthermore paragraph [0032] discloses that emails that contain characteristics that would place it in two categories would include a visual indication to

Art Unit: 2456

the user that the email is contained in more than one directory. Thus it is seen that the property of its rating is added to the email), **and**

**wherein a user can override the junk score via a user-based action that affects the junk score of the message and future messages** (Paragraphs [0018], [0032] and [0033] of Rajan disclose other algorithms maybe be employed to allow the recipient to vote on the grey mail (user-based action) and train the system to better determine spaminess according to the recipient's personal preferences (the affects the junk score of the message and future messages). Then if a user votes an email as spam (user-based action that overrides the junk score of the message) all email resembling the email that was the subject of the vote is moved from the gray directory to the black)

**[and wherein the user-based action comprises replying to the message];**

**[a verification component that requests confirmation regarding the user-based actions on rated messages]; and**

**a display component that renders the junk scores as an actionable property on a user interface to facilitate user management of incoming junk messages communicated from the filtering component** (Paragraph [0017] of Rajan discloses after grading the e-mail messages they are then moved into the appropriately labeled directory. It is seen that the score was used as an actionable property to sort the incoming messages to the appropriate folders)

Rajan does not explicitly disclose **that accepts the incoming message communicated from the message receiving component and determines whether a sender is known or trusted before scanning the message with a filter.**

Art Unit: 2456

However, Murray discloses this (Figure 2 of Murray discloses checking if the sender of an email is on a whitelist or a blacklist before categorizing the email message. Thus it determines whether or not a sender is known or trusted before scanning the message with the filter to categorize the email)

It would have been obvious to one of ordinary skill in the art at the time of invention to combine providing scores based on the spaminess of incoming email as disclosed by Rajan, with checking if a sender is on a whitelist before categorizing the email as disclosed by Murray. One of ordinary skill in the art would have been motivated to combine to use a known technique to improve similar systems in the same way. Both systems deal with preventing spam messages and as such applying Murray's filtering techniques to Rajan would be obvious for improved efficiency. Rajan further supports filtering according to sender in paragraph [0034] where it gives an example of being able to identify emails from the user's spouse.

Rajan discloses **which is added as a property on the message**

However, Horvitz more clearly discloses this. Column 14 lines 1-40 of Horvitz disclose the legitimate mail can be rank ordered within their respective folders in terms of their ascending corresponding confidence levels. Furthermore, not only can these messages be rank ordered but additionally or attentively the messages themselves or a certain visual identifier for each message can be color coded. Thus since the messages can be ranked and colored according to their rating it is seen to be a property of the message that is exposed to the user.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the spam system as disclosed by Rajan, with exposing the junk rating to the user as disclosed by Horvitz. One of ordinary skill in the art would have been motivated to combine to



Art Unit: 2456

apply simple substitution of one known element for another to obtain predictable results.

Column 5 lines 20-35 of Horvitz explain that methods other than moving a message identified as spam to a folder can be used to visually distinguish the message from others. For example the color of a message deemed to be spam can be changed. Thus it is seen that Horvitz lists the two as obvious alternatives of each other.

Rajan does not explicitly disclose **and wherein the user-based action comprises replying to the message**

However, Arthur discloses this. Column 8 lines 3-22 of Arthur disclose taking advantage of the fact that mail that a user replies to is likely to not be junk. Arthur further discloses that a message being replied to is marked as not junk.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the spam system as disclosed by Rajan, with using replies as a variable of testing spam as disclosed by Arthur. One of ordinary skill in the art would have been motivated to combine to use a known technique to improve similar devices in the same way.

Rajan does not explicitly disclose **a verification component that requests confirmation regarding the user-based actions on rated messages**

However, Adkins discloses this. Paragraph [0176] of Adkins discloses a user attempting to inspect the content of a message that is very likely spam is warned that the message is unacceptable and strongly advised not to open it.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the spam system as disclosed by Rajan, with warning a user of their action as disclosed

Art Unit: 2456

by Adkins. One of ordinary skill in the art would have been motivated to combine to use a known technique to improve similar devices in the same way.

13. **As to Claim 2**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 1, **further comprising a view management component that provides one or more ways the user can modify treatment of the junk messages** (Paragraph [0031] of Rajan discloses the user being able to specify the number of spam directories desired. Additional user-settable configurations may include the ability to name and color-code the spam directories, as well as the ability to assign their respective ranges).

14. **As to Claim 3**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 2, **the view management component comprises any one of the following ways to mitigate against inadvertently opening a junk message comprising:**  
**sorting and/or grouping messages based at least in part on at least one of their respective junk scores and their respective junk ratings** (Paragraph [0017] of Rajan discloses grading emails and then moving them into their appropriately labeled directories);  
**filtering out messages with at least one of a junk score or a junk rating that does not satisfy at least a first criterion** (Paragraph [0017] of Rajan discloses grading emails and then moving them into their appropriately labeled directories);  
**setting one or more actions to take against the messages when at least one of the respective junk scores or junk ratings that do not satisfy at least a second criterion** (Paragraph [0017]

Art Unit: 2456

of Rajan discloses grading emails and then moving them into their appropriately labeled directories); **and**

**visually altering displays of messages according to at least one of their respective junk scores or junk ratings** (Paragraph [0032] of Rajan discloses emails placed in more than one directory would include a visual indication to the user that the email is contained in more than one directory).

15. **As to Claim 4**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 3, **the first criterion is configurably different from the second criterion** (Paragraph [0031] of Rajan discloses being able to assign ranges associated with the directories).

16. **As to Claim 5**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 3, **at least one of the first and second criteria is determined according to user preferences** (Paragraph [0031] of Rajan discloses a user being able to assign ranges associated with the directories).

17. **As to Claim 6**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 3, **visually altering the displays comprises color-coding, changing fonts, font sizes, backgrounds, adding or altering images, and/or adding or altering sounds associated with the respective messages based at least in part on their respective junk scores** (Paragraph [0032] of Rajan discloses emails placed in more than one directory would include a visual indication to the user that the email is contained in more than one directory).

Art Unit: 2456

Although how the visual indication is achieved is not explicitly disclosed it is seen that all variants disclosed exist essentially to make messages stick out to the user. As such Rajan, having disclosed including a visual indication to the user, discloses the limitations above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of the above variants to draw the attention of the user to the affected messages.

Furthermore, Column 14 lines 1-40 of Horvitz disclose the legitimate mail can be rank ordered within their respective folders in terms of their ascending corresponding confidence levels.

Furthermore, not only can these messages be rank ordered but additionally or attentively the messages themselves or a certain visual identifier for each message can be color coded.).

18. **As to Claim 7**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 1, **further comprising an analysis component that examines junk scores of the incoming messages and orders them based at least in part on a spam confidence level associated with the respective messages** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory).

19. **As to Claim 8**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 1, **the display component is a user-interface that exposes a message's junk score to a user so that the user can organize its messages based in part on the respective junk scores** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. The

Art Unit: 2456

message having been moved to specific directories is seen to have been exposing the message's junk score. The directories themselves are seen to represent the messages having been organized based on their scores).

20. **As to Claim 9**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 1, **the filtering component further determines whether a source of the message appears to be trusted based on at least one of the following: user's blocked senders list, safe-list, address book, and safe-mailing list** (Paragraph [0034] of Rajan discloses the system can base its decision on which directory receives an e-mail on criteria other than spaminess. For example, the system can mine a personal profile of the user to determine which is the appropriate directory for an e-mail).

21. **As to Claim 11**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 1, **the verification component fails user requests to perform an action with respect to a junk message until the user requests are verified by the users** (Paragraph [0176] of Adkins discloses a user attempting to inspect the content of a message that is very likely spam is warned that the message is unacceptable and strongly advised not to open it. Accordingly it is seen that the action would not be performed unless the user decides to continue despite the warning)

22. **As to Claim 12**, Rajan-Murray-Horvitz-Arthur-Adkins discloses the invention as claimed as described in claim 1, **wherein the messages are bucketized based on the determined junk**

Art Unit: 2456

**score so that the effects of features are seen only in aggregate, thereby mitigating reverse engineering of the junk score** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. This is seen as bucketizing the scores).

23. Claims 15, 17, 18, 21-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajan and further in view of Murray and further in view of Horvitz and further in view of Adkins.

24. **As to Claim 15**, Rajan discloses **a method that facilitates identification of junk messages in a user's inbox comprising:**  
**employing a processor to execute the identification of junk messages** (Paragraph [0031] of Rajan discloses the grading of the e-mail for spaminess may be processed by either the server or the client processors), **comprising:**  
**receiving a plurality of incoming messages** (Paragraph [0014] of Rajan discloses an Inbox in which all incoming mail is normally received);  
**[determining whether a sender is known or trusted]**  
**assigning a junk rating to the messages** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. Where being in a particular directory is seen as having been assigned a rating);

Art Unit: 2456

**exposing at least the junk rating on a user interface** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. Where being in particular directory is seen as having exposed the junk rating); **and**

**calculating a junk score for substantially all incoming messages** (Paragraph [0015] of Rajan discloses each piece of incoming mail is graded), **the junk score is computed to reflect a spam confidence level of the message** (Paragraph [0015] of Rajan discloses grading is done to determine the level of spaminess of the e-mail), **wherein the junk score is a value or fractional value between 0 and 1** (Paragraph [0016] of Rajan discloses the scale being from 0 to 100.

Where the it is seen that it is arbitrary whether the scale is form 0 -1 or from 0-100 since both represent the same information), **and the spam confidence level corresponds to a probability that the message is spam or junk** (Paragraph [0016] of Rajan disclose mail that is graded with a high level of spaminess is representative of likely constituting spam and that mail that is graded with a medium level of spaminess is representative of probably constituting spam. Thus it is seen that the measure of spaminess corresponds to the probability that a message is spam);

**bucketizing the message based on the calculated score** (Paragraph [0017] of Rajan discloses after grading the e-mail messages they are then moved into the appropriately labeled directory (bucketizing based on score) ;

**tagging the message with a junk rating [which is added as a property on the message]** (Paragraph [0017] of Rajan discloses after grading the e-mail messages they are then moved into the appropriately labeled directory (bucketizing based on score). It is seen that the score was used as an actionable property to sort the incoming messages to the appropriate folders.

Art Unit: 2456

Furthermore paragraph [0032] discloses that emails that contain characteristics that would place it in two categories would include a visual indication to the user that the email is contained in more than one directory. Thus it is seen that the property of its rating is added to the email); **and determining whether at least one of the junk score or the junk rating exceed a first threshold** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. Where being assigned to any of the variety of other directories is seen to indicate that the junk rating exceeded a given threshold);

**removing message that exceed the first threshold to mitigate inadvertent access of them by the user, wherein the message that exceed the first threshold are removed before they are viewable on the user interface** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. Paragraph [0031] of Rajan discloses the incoming Mail once graded may bypass the Inbox altogether and be immediately moved or copied into the respective spam directory according to its grade)

**overriding the junk score via a user-based action that affects the junk score of the message and future messages** (Paragraphs [0018], [0032] and [0033] of Rajan disclose other algorithms maybe be employed to allow the recipient to vote on the grey mail (user-based action) and train the system to better determine spaminess according to the recipient's personal preferences (the affects the junk score of the message and future messages). Then if a user votes an email as spam (user-based action that overrides the junk score of the message) all email resembling the email that was the subject of the vote is moved from the gray directory to the black), **wherein a**



Art Unit: 2456

**confirmation is presented regarding the user-based action on the message. the user-based action including one or more of modifying or replying to the message.**

Rajan does not explicitly disclose **determining whether a sender is known or trusted.**

However, Murray discloses this (Figure 2 of Murray discloses checking if the sender of an email is on a whitelist or a blacklist before categorizing the email message. Thus it determines whether or not a sender is known or trusted before scanning the message with the filter to categorize the email)

Examiner recites the same rationale to combine used in claim 1.

Rajan discloses **which is added as a property on the message**

However, Horvitz more clearly discloses this. Column 14 lines 1-40 of Horvitz disclose the legitimate mail can be rank ordered within their respective folders in terms of their ascending corresponding confidence levels. Furthermore, not only can these messages be rank ordered but additionally or attentively the messages themselves or a certain visual identifier for each message can be color coded. Thus since the messages can be ranked and colored according to their rating it is seen to be a property of the message that is exposed to the user.

Examiner recites the same rationale to combine used in claim 1.

Rajan does not explicitly disclose **wherein a confirmation is presented regarding the user-based action on the message. the user-based action including one or more of modifying or replying to the message**

However, Adkins discloses this. Paragraph [0176] of Adkins discloses a user attempting to inspect the content of a message that is very likely spam is warned that the message is unacceptable and strongly advised not to open it.

Examiner recites the same rationale to combine used in claim 1.

25. **As to Claim 17**, Rajan-Murray-Horvitz-Adkins discloses the invention as claimed as described in claim 15, **wherein the messages are bucketized based on the calculated junk score so that the effects of features are seen only in aggregate, thereby mitigating reverse engineering of the junk score** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. This is seen as bucketizing the scores).

26. **As to Claim 18**, Rajan-Murray-Horvitz-Adkins discloses the invention as claimed as described in claim 15, **further comprising organizing junk messages based at least in part upon their junk rating** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory).

27. **As to Claim 21**, Rajan-Murray-Horvitz-Adkins discloses the invention as claimed as described in claim 15, **the junk rating is based at least in part on one of the following: junk score, one or more safe lists, one or more safe sender lists, user-based actions, and/or user-generated address book** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. Then paragraph [0033] of Rajan discloses being able to adjust placement of e-mails based on user voting. Then paragraph [0034] of Rajan discloses the system can mine a personal profile of the user to determine which is the appropriate directory for an e-mail).

28. **As to Claim 22**, Rajan-Murray-Horvitz-Adkins discloses the invention as claimed as described in claim 21, **user-based actions comprises at least one of the following:**  
**unjunking a message by moving it from a junk state to a non-junk state resulting in an "unjunked" junk rating** (Paragraph [0018] of Rajan discloses a user being able to vote on mail);  
**junking a message by moving it from a non-junk state to a junk state resulting in a "junked" junk rating** (Paragraph [0033] of Rajan discloses a user being able to vote an e-mail as spam); and  
**adding a sender to one or more safe lists to change the junk rating of the message to safe** (Paragraph [0034] of Rajan discloses the system being able to mine a personal profile of the user to determine which is the appropriate directory for an e-mail. An example given is all e-mail from the user's spouse would be place in an appropriate folder. Thus it is seen that a sender was added to a safe list).

29. **As to Claim 23**, Rajan-Murray-Horvitz-Adkins discloses the invention as claimed as described in claim 22, **the user-based actions affect the junk rating of the message and/or future messages received from a particular sender** (Paragraph [0018] of Rajan discloses algorithms may be employed to allow the recipient to vote on the mail to train the system to better determine spaminess according to the recipient's personal preferences).

Art Unit: 2456

30. **As to Claim 24**, Rajan-Murray-Horvitz-Adkins discloses the invention as claimed as described in claim 15, **assigning a junk rating to messages commensurate with at least their respective junk scores** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory).

31. **As to Claim 25**, Rajan-Murray-Horvitz-Adkins discloses the invention as claimed as described in claim 15, **bucketizing the message based on the calculated junk score comprises:**

**providing a plurality of buckets comprising at least the following categorized buckets: an unscanned bucket, a light bucket, a medium bucket, and a high bucket, the plurality of buckets respectively assigned to a range of junk score values** (Paragraph [0019] of Rajan discloses being able to assign a variety of directories based on different ranges. The example given suggests five directories - Green, Blue, Yellow, Orange and Red with respective ranges of 0-20, 21-40, 41-60, 61-80 and 81-100. As to having an unscanned bucket it is seen that all incoming mail is inherently part of the unscanned bucket until otherwise sorted);

**dropping messages into respective buckets based at least in part on their calculated junk score such that the respective bucket determines the junk rating for the respective messages** (Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory).

32. **As to Claim 26**, Rajan-Murray-Horvitz-Adkins discloses the invention as claimed as described in claim 15, **further comprising exposing respective junk scores for the messages**

Art Unit: 2456

(Paragraph [0017] of Rajan discloses grading the e-mail according to the level of spaminess and then moving the e-mail into the appropriately labeled directory. Since the ranges of the directories are known it is seen that knowing which directory the e-mail is in exposes the junk score of the message).

33. As to **Claim 29**, Rajan-Murray-Horvitz-Adkins discloses **a computer storage media having stored thereon the system of claim 1** (Claim 11 of Rajan discloses a computer readable medium comprising instructions for the system disclosed by Rajan).

### *Conclusion*

34. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2456

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN S. MAI whose telephone number is (571)270-5001. The examiner can normally be reached on Monday through Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. S. M./

Examiner, Art Unit 2456

/Rupal D. Dharia/

Supervisory Patent Examiner, Art Unit 2400